

Amendments to the Claims

Claims 1-10 were previously cancelled.

11. (Currently amended) A filter for reducing non-uniformities in a plasma etching process, comprising:

a first region comprising a material having a first non-zero transmittance with respect to infrared wavelength(s) suitable for use in the plasma etching process, with the first non-zero transmittance being sufficiently large so that the infrared radiation transmitted is sufficient to etch plasma; and

a second region comprising a material having second non-zero transmittance with respect to infrared wavelength(s) suitable for use in the plasma etching process that is different than said first non-zero transmittance with respect to infrared wavelength(s) suitable for use in the plasma etching process, with the second non-zero transmittance being sufficiently large so that the infrared radiation transmitted is sufficient to etch plasma.

12. (Original) The filter of claim 11, wherein said first region comprises a perimeter of said filter and said second region comprises a center portion of said filter.

13. (Original) The filter of claim 12, wherein said first transmittance is lower than said second transmittance.

14. (Original) The filter of claim 11, wherein said first region and said second region are eccentric.

15. (Original) The filter of claim 11, wherein said second region is positioned to reduce transmission in areas where said plasma etching process experiences magnetic field cusping.

16. (Original) The filter of claim 11, wherein said filter comprises optical quality glass having a layer of metallic coating of a predetermined thickness.

17. (Currently amended) The filter of claim ~~11~~ 16, wherein the thickness of said layer of metallic coating varies to form said first and said second regions.

18. (Previously presented) The filter of claim 11 wherein:
said first region is shaped to compensate for spatial etch distortions in the plasma etching process; and
said second region is shaped to compensate for spatial etch distortions in the plasma etching process.

19. (Currently amended) The filter of claim 11 wherein:
said first region is further adapted to ~~select for~~ selectively transmit a resonant frequency of infrared radiation; and
said second region is further adapted to ~~select for~~ selectively transmit a resonant frequency of infrared radiation.

20. (Currently amended) A filter for reducing non-uniformities in a plasma etching process, comprising:

a first surface adapted to receive and transmit infrared radiation having wavelength(s) suitable for the plasma etching process; and

a filtering structure having an area located to receive and transmit the infrared radiation through said first surface, with the filtering structure being characterized by a plurality of transmission regions, with said transmission regions of said plurality of transmission regions being respectively characterized by a metallic coating having different respective thicknesses and varying degrees of transmittance with respect to the infrared wavelength(s) suitable for the plasma etching process, and with said transmission regions of said plurality of transmission regions being distributed over said area so that they mirror spatial etch distortions that would occur in the plasma etching process absent the selective transmission of infrared radiation by said filtering structure;

wherein the transmission regions of the plurality of transmission regions have a transmittance sufficiently large to sufficiently transmit infrared radiation to etch plasma.

21. (Currently amended) A device for plasma etching of a wafer, the device comprising:

an infrared radiation source adapted to emit infrared radiation having infrared wavelength(s) suitable for use in plasma etching;

a wafer chuck adapted to secure the wafer at a wafer position; and

an infrared filter located between said infrared source and the wafer position in a path of the emitted infrared radiation, the filter comprising:

a first region comprising a material having a first non-zero transmittance with respect to the emitted infrared wavelength(s), with the first non-zero transmittance being sufficiently large so that the infrared radiation transmitted is sufficient to etch plasma, and

a second region comprising a material having second non-zero transmittance with respect to the emitted infrared wavelength(s) that is less than said first non-zero transmittance with respect to the emitted infrared wavelength(s), with the second non-zero transmittance being sufficiently large so that the infrared radiation transmitted is sufficient to etch plasma.